MASCART ON CHANGES OF CLIMATE

Mascart, Jean: Notes sur la variabilité des climats. Documents Lyonnais, Études de Climatologie, première partie, introduction générale historique. Lyon. M. Audin et Compagnie. (Not dated.)

Not since the publication of Ward's discussion of changes of climate, in his *Climate, Considered Especially in Relation to Man*, have climatologists been furnished with a more useful work. The director of the Lyon Observatory set himself a tremendous task. The result might almost have been called a "Handbook on the Variability of Climates."

Concise outlines of the historical development undergone by the various hypotheses of climatic change occupy each a short chapter. There is no lack of searching criticism and sprightly comment on the contradictions revealed by comparison of the different hypotheses. Nor has Mascart hesitated to include the views of the less authoritative writers or even of the occasional "vulgarisateur." In spite of the feeling that perhaps the work is thus a bit encumbered, one concludes that to quote them has after all served a purpose.

The author has avoided repetition of citations by wisely placing most of the references in a bibliography, compressed into some 60 pages near the end of the book. About a thousand authors are cited; probably not all readers will agree that the most important contribution of each has been included. But whatever the slight failing in this regard, it fades into insignificance in comparison with the vast usefulness of the whole. A valuable feature of this bibliography are the numerous references to abstracts and reviews.

To some readers the complex array of hypothesis and counterhypothesis will but prove that the whole question of changes of climate is in a bad way. To others it will distictly indicate hope of progress. That is the spirit of the "Critical Résumé" and "Conclusions." They constitute a diagnosis which everyone interested in the question will do well to read with care. The author emphasizes the value of a great erudition as the basis for acquiring that broad *and rare* perspective which alone can furnish adequate foundation for research into this baffling subject. He presents, moreover, a vivid arraignment of meteorology and climatology as having progressed in spite of the data which they have amassed, not because of them. The trouble is statistical indigestion. Failure to recognize this has been the cause of much bootless researching. Not until climatologists are willing to put their data through drastic sifting processes capable of discovering the nature of terrestrial atmospheric changes, may they hope for any real progress toward the discovery of causes. Especially for those who have a tendency to enter somewhat light-heartedly into research on fluctuations of climate, Mascart has a clear message.—*B. M. V.*

METEOROLOGICAL SUMMARY FOR SOUTHERN SOUTH AMERICA, JULY, 1925

[Reported by Señor J. B. Navarrete, El Salto Observatory, Santiago, Chile. Translation by B. M. V.]

July in general was relatively rainy over the whole southern part of the continent, and especially so during the second half of the month.

On the 1st, pressure rose over the whole southern region, resulting in the establishment of an anticyclonic régime, with good weather, cold and frosts, which lasted until the 13th.

On the 3d an important depression appeared in the northwest in the latitude of Coquimbo Province, causing brisk winds and rain from Iquique to Illapel. The maximum precipitation was observed at Ovalle, 28 mm. On the 4th occurred the phenomenon of the compression of the cyclone by strong converging winds, in harmony with the laws of Guilbert.

In the Argentine during the 2d to 4th, there were rains between Bahia Blanca and Salta. On the 6th and 7th an important depression affected Buenos Aires Province, with strong winds and heavy showers. At Bahia Blanca, 14 mm. fell on the 6th.

On the 14th a considerable depression appeared in the west, while the southern anticyclone spread toward the interior of the continent. During the 15th–18th the major depression began to affect the central zone of Chile, causing bad weather and rains. The heaviest precipitation was observed at Valparaiso on the 17th, 51 mm. During the 19th–23rd the depression gradually spread southward, and rainy and windy weather continued to alternate with each other in the provinces of southern Chile. On the 20th, the velocity of the NW. wind at Juan Fernandez reached 1,700 m. p. m. [63.3 m. p. h.].

On the 24th a new depression appeared in the west. It began to affect the continent on the 25th. On the 26th, rainy and windy weather dominated the region from Valparaiso to Corral. At the Island of Mocha the north wind attained a velocity of 1,800 m. p. m. [67.1 m. p. h.]. On the 27th–28th the depression advanced southward, causing a decrease in pressure in that region.

On the 30th, a new depression passed on the south, the pressure falling to 736 mm. (981 mb.) at Punta Arenas on the 31st. It rained from Valdivia to Magellanes.

BIBLIOGRAPHY

C. FITZHUGH TALMAN, Meteorologist in Charge of Library

RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Associated factory mutual fire insurance companies.
Effects of tornadoes on factory buildings, with especial reference to the Missouri-Illinois-Indiana tornado, March 18, 1925. Boston. 1925. 25 p. illus. 18½ cm.

Bacmeister, A., & Baur, Fr.
Die klimatische Behandlung der Tuberkulose. 46 p. figs. 26½ cm. (Ergebnisse der gesamten Medizin. Bd. 7.)

Besson, Louis.
La pluie a Paris d'après cinquante années d'observations. [Paris. 1924.] 43 p. illus. 25½ cm. (Serv. phys. et mét. Observ. de Montsouris et de la Tour Saint-Jacques.) [Annales serv. tech. d'hygiène de la ville de Paris. T. 5, météorologie.]

Bradfield, F. B.
Aerodynamic properties of a hemispherical cup. With application to the hemispherical cup windmill and anemometer. London. 1921. 16 p. 24½ cm. (Aeron. research comm. Rep. & mem., no. 712.)

Brockmann-Jerosch, H.
Regenkarte der Schweiz. sheet. 48 x 64 cm. (Beilage zur "Vegetation der Schweiz, Beiträge zur geobotanischen Landesaufnahme." H. 12, Zürich, 1923.)